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NOTICE OF ALLOWANCE AND FEE(S) DUE

20988 7590 03/24/2008

OGILVY RENAULT LLP 1981 MCGILL COLLEGE AVENUE SUITE 1600 MONTREAL, QC H3A2Y3 CANADA EXAMINER
BRIER, JEFFERY A
ART UNIT PAPER NUMBER

2628 DATE MAILED: 03/24/2008

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/526,442 | 03/16/2000 | Kamran Ahmed | 10442-5"US" JA/MB | 2596 |

TITLE OF INVENTION: VIDEO DISPLAY SYSTEM WITH TWO CONTROLLERS EACH ABLE TO SCALE AND BLEND RGB AND YUV SURFACES

| APPLN, TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$0 | \$0 | \$1440 | 06/24/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT AGRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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| APPLICATION NO. | FILING DATE | | | FIRST NAMED INVEN | FOR | | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
| 09/526,442 | 03/16/2000 | | | Kamran Ahmed | | | 104 | 42-5"US" JA/MB | 2596 |
| TITLE OF INVENTION SURFACES | N: VIDEO DISPLAY | SYSTE | EM WITH TWO | CONTROLLERS E | кСН | ABLE TO SCAL | E AN | D BLEND RGB AN | ID YUV |
| APPLN, TYPE | SMALL ENTITY | IS | SUE FEE DUE | PUBLICATION FEE D | UE | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | | \$1440 | \$0 | | \$0 | | \$1440 | 06/24/2008 |
| EXAM | INER | | ART UNIT | CLASS-SUBCLASS | | | | | |
| BRIER, JE | FFERY A | | 2628 | 345-603000 | | | | | |
| "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attack ND RESIDENCE DAT. ess an assignee is ident h in 37 CFR 3.11. Com | nge of " Indicated. Use | Correspondence ation form e of a Customer | | p to nativ ingle or a attor I be p r typ re pa | 3 registered patent ely, 2 firm (having as a gent) and the name neys or agents. If r printed. e) ttent. If an assigne assignment. | membes of up | er a 2 o to e is 3 | ocument has been filed for |
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| | s SMALL ENTITY state | ıs. See | 37 CFR 1.27. | | | | | TTY status. See 37 CF | |
| NOTE: The Issue Fee and interest as shown by the r | d Publication Fee (if req records of the United Sta | uired) v ites Pat | will not be accepted ent and Trademark | d from anyone other the Office. | ian th | ne applicant; a regis | stered a | ttorney or agent; or th | e assignee or other party in |
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| Typed or printed name | | | | | | Registration N | | | |
| This collection of informan application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, Valexandria, Virginia 223 | ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu iriginia 22313-1450. DO 13-1450. | FR 1.3 U.S.C USPT rden, sl O NOT | 11. The informatic . 122 and 37 CFR O. Time will vary hould be sent to th SEND FEES OR 6 | on is required to obtain 1.14. This collection is depending upon the e Chief Information O COMPLETED FORM | or re s esti ndivi ffice S TC | etain a benefit by the imated to take 12 m idual case. Any co r, U.S. Patent and THIS ADDRESS | ne publ ninutes mment Fraden . SENI | ic which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa D TO: Commissioner f | by the USPTO to process) g gathering, preparing, and se you require to complete rtment of Commerce, P.O. for Patents, P.O. Box 1450, |

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CANADA

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| OGILVY REN | AULT LLP | BRIER, JE | FFERY A | | | |
| | OLLEGE AVENUE | ART UNIT | PAPER NUMBER | | | |
| SUITE 1600 MONTREAL, QC H3A2Y3 | | | 2628 DATE MAILED: 03/24/2008 | | | |

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 1736 day(s). Any patent to issue from the above-identified application will include an indication of the 1736 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

| Application No. | Applicant(s) |
|------------------|---------------|
| 09/526,442 | AHMED, KAMRAN |
| Examiner | Art Unit |
| Jeffery A. Brier | 2628 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to the 02/11/2008 Board Decision. 2. The allowed claim(s) is/are 1-7. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1.

 Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF
- INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date
 - (b) Including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 01/13/2003.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- 6. Interview Summary (PTO-413), Paper No./Mail Date
- 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Notice of Allowability

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Application/Control Number: 09/526,442
Art Unit: 2628

 This office action is in response to the 2/11/2008 Board Decision. Claims 1-7 are allowed. The after final amendment filed on 5/13/2003 has been entered and overcomes the objection to the drawings set forth in the office action mailed on 01/13/2003

Drawings

- 2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the 03/16/2000 drawings are informal and the drawing changes filed on 5/13/2003 are approved. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.
- 3. The claims have been renumbered according to the following table.

| Original claim no. | New claim no. |
|--------------------|---------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |

Application/Control Number: 09/526,442 Art Unit: 2628

Related Application

 Ahmed US Patent No., 6,774,912, is 09/526,440 which is incorporated by reference at page 1 of the specification describes. (emphasis added with underlining)

Detailed Description Text - DETX (6):

As illustrated in FIG. 2, the YUV pixel path within CRTCI includes a FIFO 13, a scaler 14 and a color space converter 15 in order to convert the YUV pixel format data into RGB pixel format data for the purposes of the subsequent overlaying or blending and scaling to fit the window if necessary. The overlaying unit, not shown in the FIGS. 1 or 2, may comprise as a minimum a multiplexer, but can also comprise a blending unit which is able to blend two surfaces in accordance with the alpha data of the pixel data. When overlay is desired, the alpha data is set to cause overlay with no blending. The second overlay surface can be a graphic bitmap or other type of surface. Typically, but not exclusively, this is used to display a DVD sub-picture overlay surface over a DVD decoded picture. For example, the secondary display controller's main surface could either be in YUV (4:4:4, 4:2:2, 4:1:1, 4:2:0) or YCbCr (4:4:4, 4:2:2, 4:1:1, 4:2:0) or RGBalpha (8, 16, 24, 32 bpp) format which allows for various types of surfaces to be displayed (grabbed video from video input port, SVM decoded video, graphic images etc.).

Detailed Description Text - DETX (8):

As illustrated in FIG. 3, CRTC1 and/or CRTC2 can be provided with a sub-picture blending unit 15 which is capable of being operated either to provide overlay or blending as illustrated in FIG. 3. The sub-picture blending unit 15 contained within CRTC1 has the ability to overlay one surface over another. In the illustration of FIG. 3 a logo identified as the letter C is either blended or overlaid within a video surface. The blending unit will blend an RGB surface over a YUV surface. Alternatively, the sub-picture blending unit blends, or more typically overlays, the YUV video surface onto the main display buffer to generate the display. One application of this would be adding logos, subtitles etc. In the case of DVDs (as an example) where the language of the subtitles is user selectable, the sub-titles are not embedded in the source of the YUV surface but are overlaid in real-time from a user selectable source.

While the instant claimed invention performs in the claimed method both blend and overlay.

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Application/Control Number: 09/526,442

Art Unit: 2628

Reasons for Allowance

5. The following is an examiner's statement of reasons for allowance:

At page 8 the Board of Appeals wrote:

The original disclosure remains uncontested as having recited the feature of "blend and/or overlay" which clearly includes both blend and overlay. As argued by Appellant, the change to the current language of "at least one of blend and overlay" removes the alternative language "or" while being within the bounds of the disclosed invention.

At page 10 the Board of Appeals wrote:

Initially we note that, contrary to the Examiner's position, the claim can only require blending or overlaying, not both, and as discussed above with respect to the § 112 rejection, each display controller combines the surfaces by both blending and overlaying.

At page 11 the Board of Appeal wrote:

We do not find convincing the Examiner's line of reasoning that such additional logic necessarily means a second display controller. As argued by Appellant (Br. 13-14), the Examiner's suggestion for additional logic to be a second display controller goes beyond the disclosure of the reference and, rather than any evidence of record, finds its basis only in speculation (FF 4-5).

Thus, the prior art of record fails to teach of suggest in the context of claim 1 first and second display controllers that blend and overlay respective at least two surfaces where both blending of the at least two surfaces and overlaying of the at least two surfaces occur in the claimed method rather than the prior art's blending or overlaying of the at least two surfaces.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 09/526,442 Art Unit: 2628

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A Brier whose telephone number is (571) 272-7656. The examiner can normally be reached on M-F from 7:30 to 4:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (571) 272-7664. The fax phone Number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jeffery A. Brier/ Primary Examiner, Division 2628